



Stream and Wetlands System Protection Policy

Public Workshop

San Francisco Bay Regional Water Quality Control Board

Feb. 6, 2007

Meeting Outline

- Policy Need
- Scientific Concepts
- Proposed Amendment Scope
- Public Comments

The Stream Policy will...

- More explicitly acknowledge connection between physical integrity of stream and wetland systems and water quality
- Expand consideration of cumulative effects

The Stream Policy will...

- Improve success of wetland and riparian area mitigation
- Provide more consistent and predictable permitting outcomes
- Advance policy to reflect best practices and science

Stream Policy Drivers

- Regional Water Board identified policy as high priority in 2004 Basin Plan Triennial Review
- U.S. EPA grant supporting development of policy in North Coast and San Francisco Bay Regions

The Stream and Wetlands System



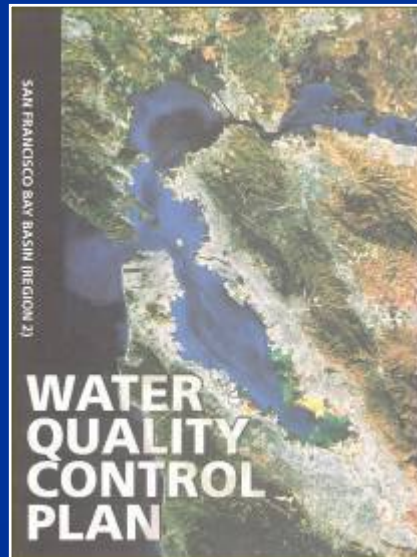
Stream and Wetlands System Functions

- Water Filtration
- Sediment Transport and Storage
- Temperature and Microclimate Control
- Streambank Stability
- Fish and Wildlife Habitat
- Flood Peak Attenuation
- Groundwater Recharge
- Large Woody Debris Input
- Energy and Nutrient Cycling



Proposed Basin Plan Amendment

- Establish new *beneficial uses*
- Establish new *water quality objectives*
- Include *implementation plan* with specific actions to meet new water quality standards



Beneficial Use

Flood Water Storage / Flood Peak Attenuation

Waterbodies that receive and store natural surface drainage to reduce the flood peak downstream



Beneficial Use

Water Quality Enhancement

Waterbodies that support natural enhancement of water quality including:

- filtration of water pollutants
- streambank stabilization
- maintenance of channel integrity
- temperature moderation
- erosion control
- sediment storage



Water Quality Objectives

Propose new water quality objectives that protect the dynamic structure and function of stream and wetland systems:

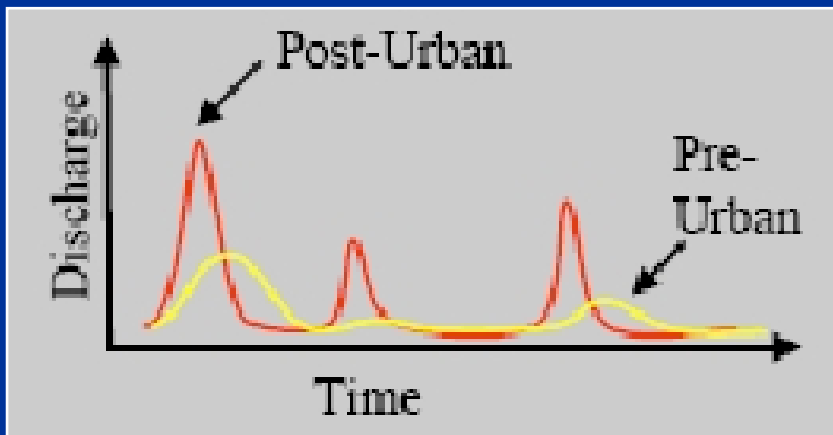
- Hydrology
- Stream Channels
- Riparian Vegetation
- Floodplains
- Wetlands
- In-stream Habitats



Hydrology

Protect *watershed infiltration capacity* to :

- reduce flood peak flows
- increase groundwater availability and stream base flows
- provide hydrologic conditions that support wetlands and riparian areas



Stream Channels

Maintain *stream channel shapes, slopes, and planforms* to protect the dynamic balance between sediment and water discharges.



Riparian Vegetation

Protect and establish *riparian vegetation* to the degree necessary to:

- prevent destabilizing erosion
- moderate stream temperatures
- provide cover, food, and habitat for aquatic and terrestrial communities
- filter pollutants
- store sediment



Floodplains

Protect *connectivity between the stream channel and floodplain* and *flood water storage capacity* to provide:

- storage and attenuation of high flows
- pollutant filtration
- reduction of erosive forces
- adequate space for natural adjustments of the active channel
- sediment storage
- wildlife habitat
- groundwater recharge
- nutrient cycling



Wetlands

Protect *physical, chemical, and biological characteristics* to:

- store natural surface drainage
- recharge groundwater and surface waterbodies
- store and transport sediment
- maintain beneficial water temperatures
- cycle nutrients
- maintain biodiversity
- filter pollutants
- provide wildlife habitat



Instream Habitats

Maintain in-stream habitat and associated fauna by protecting:

- reproductive and rearing areas
- base flows
- substrate characteristics
- movement corridors



Implementation Plan

Policy Application

Link to existing relevant permits and programs:

- WDRs
- 401 certifications
- THP reviews
- CEQA reviews
- WDR waivers
- NPDES permits
- TMDL implementation
- Grants

Types of activities that may be regulated:

- In-channel activities
- Wetland disturbance
- Riparian area disturbance
- Floodplain management
- Stormwater and runoff management

Implementation Plan

Guidance on Policy Application

- Streams: provide definition which includes intermittent and ephemeral
- Wetlands: clarify differences between state and federal jurisdiction and provide guidance to identify wetlands not meeting federal criteria
- Riparian Areas: provide methodology to identify areas that provide water quality functions

Implementation Plan

Provide flexibility for different watershed conditions through reasonable planning and review process:

1. Avoid impacts if possible
2. Minimize unavoidable impacts through appropriate management measures
3. Mitigate remaining impacts to protect beneficial uses

Implementation Plan

Waste Discharge Prohibitions

Prohibit certain types of discharges to stream and wetland systems

Potential Examples:

- No discharge of stormwater that leads to excessive erosion
- No clearing of riparian vegetation that results in discharge of heat (solar radiation) to waters and leads to adverse increase in temperature



Implementation Plan

Performance Criteria and Permit Conditions

- Provide flexibility for different watershed conditions
- Link to permit conditions to assess compliance with water quality standards
- Potential Examples:
 - Runoff management requirements
 - Riparian buffer
 - Riparian vegetation
 - Bioengineering
 - Floodplain management



Implementation Plan

Alternative Regulatory Approach

- Local agencies, dischargers, or watershed groups develop watershed plans that meet policy goals
- Activities covered under plan receive general or conditional waiver of waste discharge requirements
- Increased flexibility for local conditions and concerns

Implementation Plan

Non-Regulatory Approach

- Promote multi-objective projects that integrate stream and wetlands protection with flood control, water supply, recreation, etc.
- Encourages local governments to adopt ordinances implementing sustainable development principles
- Give higher grant priority to local governments that adopt:
 - Ahwahnee Water Principles for Resource Efficient Land Use
 - Low-impact development, transit-oriented development, smart growth, and green building standards
 - Stream protection ordinances with riparian buffers

Next Steps

- Receive Comments (due March 9th) and Post Summary
- Draft Basin Plan Amendment and Staff Report (*Spring '07*)
- Staff Report Workshop (*Summer '07*)
- Public Review and Comment (*Fall '07*)
- Public Adoption Hearing (*Winter '07*)

Please submit written comments to Ben Livsey:

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Further Information

Visit the Policy website:

[http://www.waterboards.ca.gov/sanfranciscobay/streamandwetlands
.htm](http://www.waterboards.ca.gov/sanfranciscobay/streamandwetlands.htm)

Subscribe to the Policy email list:

http://www.waterboards.ca.gov/lyrisforms/reg2_subscribe.html